

ABSTRACT OF THE DISCLOSURE

An image reading apparatus for reading an image pattern of a detecting object comprises a detecting surface on which a detecting object is placed, a sensor array having a plurality of sensors arranged to read an image pattern of the detecting object placed on the detecting surface, a first
5 detection electrode, provided on at least an upper portion of the sensor array, having the detecting surface; a second detection electrode provided to be electrically insulated and spaced from the first detection electrode; a counter electrode provided to be opposite to the first detection electrode through an interlayer insulating film; signal voltage applying circuit which applies a signal voltage having a first signal waveform that varies periodically to the counter electrode to excite a second
10 signal waveform to the first detection electrode through the interlayer insulating film, and contact detector which determines whether the detecting object brought into contact with the detecting surface is a specific detecting object based on a third signal waveform excited to the second detection electrode according to contact of the detecting object with both the first detection electrode and the second electrode wherein a reading operation of the image pattern of the detecting object is
15 performed based on the determination result by the contact detector .